



## MANCHESTER HEALTH DEPARTMENT MONTHLY REPORT SUMMARY, JUNE 2006

### Arbovirus Surveillance & Control Program

#### **PROGRAM LISTING:**

#### **Arbovirus Surveillance & Control**

#### **Chronic Disease Prevention**

#### **Communicable Disease Control**

#### **Community Epidemiology**

#### **Dental Health**

#### **Environmental Planning and Pollution Control**

#### **Food Protection**

#### **HIV Prevention**

#### **Homeless Health Care Project**

#### **Immunizations**

#### **Institutional Inspections**

#### **Lead Poisoning Prevention**

#### **Public Health Investigations**

#### **Public Health Preparedness**

#### **Refugee Health**

#### **School Health**

#### **Sexually Transmitted Disease Control**

#### **Tuberculosis Control**

#### **Water Quality**

#### **Youth Health Promotion**

**Summary of Program:** The term “arbovirus” is short for arthropod-borne virus, and is used to describe diseases that may be transmitted to humans by the bite of an arthropod. The three arboviruses routinely monitored by the Health Department are West Nile Virus (WNV) and Eastern Equine Encephalitis (EEE) which are transmitted by mosquitoes, and Lyme Disease which is transmitted by the deer tick.

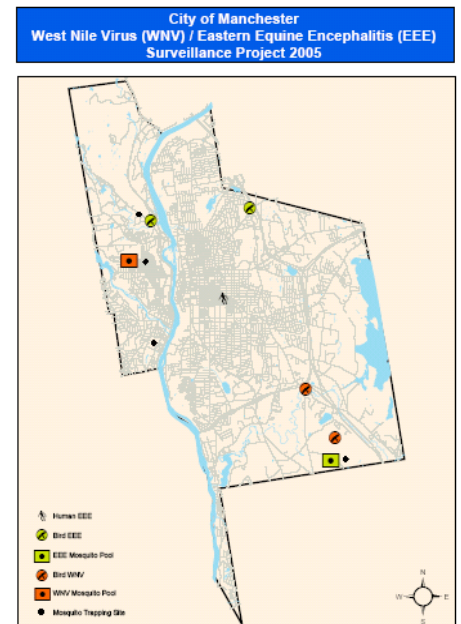
**WNV & EEE Surveillance:** There are three components to Manchester’s WNV/EEE surveillance program including bird surveillance, mosquito surveillance, and human surveillance. Bird surveillance is used to learn whether dead birds were infected with WNV or EEE. The presence of WNV or EEE infected birds in a community is used as an indicator as to the presence of disease, but does not represent an immediate human risk. Mosquito surveillance is conducted across the City from June through mid-October to identify mosquitoes that may be carrying WNV or EEE. The presence of virus-positive mosquitoes indicates that the vector for the spread of these diseases is present in a community, and that the risk to humans has substantially increased. Finally, the Health Department works with area health care providers to identify patients that may be ill due to infection with WNV, EEE and Lyme Disease. If confirmed, these patients are followed up to help understand where and how they may have become infected.

**WNV & EEE Control:** The key to preventing mosquitoes from reaching a life stage by where they can bite and transmit disease is to limit their opportunities to breed. In 2001 the City enacted an Ordinance that requires residents to maintain their property in such a manner that prevents the breeding of mosquitoes. Despite the best efforts at preventing mosquito breeding, there are times when the control of adult mosquitoes through spraying becomes warranted. The decision to spray is made when there is a clear public health threat to the community. The Health Department has a Special Permit from the NH Department of Agriculture that allows for spraying to control mosquitoes during a public health emergency.

**Public Education:** The most important element of the arbovirus program is educating the public on the prevention of mosquito breeding, as well as the personal protective measures one can take to prevent mosquito and tick bites. The Department works with the local media, other city departments, and local organizations to help get this important information out to the public.

**Summary of Activities:** During the previous year, the MHD:

- Received over 200 dead bird calls from mid-May through Mid-July
- Collected 27 birds, submitted 9 for testing, 2 tested positive for WNV, 2 tested positive for EEE
- Trapped mosquitoes nightly in 5 locations around the City from July-October
- Sorted and submitted 9,170 mosquitoes for testing
- Identified WNV positive mosquitoes trapped on 9/6/05
- Identified EEE positive mosquitoes trapped 9/14/05
- Investigated a human cases of EEE in Manchester, as well as monitored cases in Goffstown, Londonderry & Hooksett
- Investigated 17 cases of Lyme Disease in Manchester Residents
- Facilitated targeted spraying to control adult mosquitoes on City-owned property (ball fields and parks) on September 1, 2005 and September 22, 2005
- Provided information on WNV, EEE and Lyme Disease to the public through a hotline, fact sheets, public postings, City’s website, community presentations and via the media



**Program Notes and Trends:** Since 2000, when West Nile Virus was first identified in Manchester, the Health Department has been actively engaged in arbovirus surveillance and control. The purpose of an arbovirus surveillance and control program is to minimize the risk to Manchester’s residents of being exposed to and infected with mosquito-borne diseases. As we continue to learn more about the epidemiology of mosquito-borne diseases in New Hampshire, good surveillance, control and public education will be needed on an ongoing basis protect the public health in Manchester.

## **Community Activities**

### **The Great Flood of May, 2006**

The flooding that occurred in May proved to be a unique and challenging time for the Division. In response to the flooding, the Division mailed information on post-flood home recovery to over 500 households, walked flood-damaged neighborhoods, visiting over 250 homes, provided consultation to over 10 key businesses in the community, and answered dozens of phone calls from residents seeking information. Environmental Health staff manned a hotline throughout the weekend of May 20-21, and thanks to an agreement between Manchester and Goffstown, staff were able to go the town of Goffstown and provide consultative services to some of the hardest-hit areas.

The Manchester Health Department experienced heavy rain related flooding in its community health and clinical areas. This resulted in the relocation of 14 staff to temporary work-stations in the City conference space on the first floor. The flooding also impacted the Office of Youth Services, which also relocated to conference space. It is anticipated that all staff will be able to return to permanent quarters by the end of June.

### **Refugee Welcome Center & School Registration**

For the third year, the Manchester Health Department will collaborate with the Manchester School District to host the Refugee Welcome Center during the last week in August. The Welcome Center will provide refugee, immigrant, and non-English speaking families the opportunity to register their children for school, obtain bus information, take English proficiency testing, and review health history forms and vaccine records in one central location.

## **Disease Notes**

### **Notifiable Diseases**

For the month of May 24 reportable communicable diseases were investigated (excluding TB, STDs/ HIV, and other outbreak investigations). Disease reports included varicella, VRE, pertussis, hepatitis B, shiga-toxin (presumptive E.coli O157:H7), malaria, campylobacter, lyme, and giardia. Please note that this includes suspect cases, not all of which were probable or confirmed after subsequent investigation work. The total number of reported diseases (excluding TB, STDs/HIV, and other specific cases/outbreak investigations) since July 1, 2005 investigated by the Public Health Nurses is 246. The 3.5 FTE's of Community Health Nurses followed 126 clients with TB infection in May, yielding about 36 clients being followed per CHN. Of these 67 (53%) were refugees or asylees and 22 met the NH State criteria for "high risk." There were 2 cases of active TB followed by DOT with the nurses in May. To date, the TB Program Coordinator has visited 9 of 10 long-term care facilities and one day care facility to review their procedures for TB control and prevention. Also an in-service lecture on TB was given to persons at St. Teresa's Health Care Center on May 25.

### **FOR MORE INFORMATION**

Visit our website at <http://www.manchesternh.gov/CityGov/HLT/Home.html>, or call 624-6466